




# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,571	08/19/2003	David Champion	200210114-1	4913
22879	7590	12/07/2004	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			JACKSON JR, JEROME	
			ART UNIT	PAPER NUMBER
			2815	

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/643,571	<b>Applicant(s)</b> CHAMPION ET AL.	
	<b>Examiner</b> Jerome Jackson Jr.	<b>Art Unit</b> 2815	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-31 and 38 is/are allowed.
- 6) ☒ Claim(s) 1-15, 32-37 and 39-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

Art Unit: 2815

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15,32-37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tamura et al '326.

Tamura teaches stacks of transparent layers such as a liquid crystal layer, ITO display electrode, acrylic resin layer, and gate insulating layer on a glass substrate which across the surface have substantially uniform values of the optical properties transmission or reflection for visible light to reduce interference fringes, are stacked on top of or adjacent one another, and exhibit a value of transmission or reflection for each individual layer which is slightly different and have a <0.2 difference of index of refraction. Accordingly claim 1 is anticipated or at least obvious over '326 as the intended value of "different" is considered broad and undistinguishing over '326. Claim 2

Art Unit: 2815

is rejected as "substantially uniform" is broad and undistinguishing over '326. Claim 3 is rejected as the '326 device is an electrical component. Claim 4 is rejected as "spectrum normalization structure" is not considered to structurally distinguish over stacks of transparent layers of  $<0.2$  index of refraction materials in '326 which may be likewise labeled. Claim 5 is rejected as the structure of '326 likewise gives a uniform color due to the lack of interference fringes. Claim 6 is rejected as the layers of '326 are transparent. Claim 7 is rejected as above. Claim 8 is rejected as resin insulating layers typically have rounded edges and such would have been obvious in '326 where electrodes such as 28 pass through the resin to contact the transistor. Claims 9 and 10 are rejected as above. Claim 11 is rejected as the 326 device is transparent to visible light. Claim 12 is rejected as per claim 5. Claim 13 as per claim 7. Claims 14 and 15 are also rejected as above. Claims 32-37 are rejected as above and in consideration that the '326 device is a display device which normally includes a housing and light source.

Claims 1-7,9-14,32-37,39-42 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gunjima '306.

Gunjima shows a transparent display device in which an optical property, color balance or brightness or contrast ratio, is substantially uniform over the entire surface of the device, and there are a plurality of thin film stacks comprising red, green, or blue filters and transparent electrodes and liquid crystal material (figure 5), and wherein the surfaces of the individual filters would have different values of the optical property if the "stacks" were not properly sized as taught in the specification. That is, there is a different distance or path length between the electrodes 33 and 36 for each different

Art Unit: 2815

color filter to "normalize" the optical property. Claim 1 is accordingly rejected. Claim 2 is rejected as the device of '306 should likewise exhibit the same recited "graph". Claim 3 is rejected as there is an electrical component such as the electrodes 33,36. Claim 4 is rejected as the filter thicknesses or liquid crystal thickness define a "normalization structure". Claim 5 is rejected as there is color balance. Claims 6 and 7 are rejected as transmission, reflection, or absorption define "color balance" or "brightness" or contrast ratio. Claims 9-14 are similar to claims 1-7 and likewise rejected as above. Claims 32-37 are rejected as the Gunjima device is a display device with a housing and light source. See figure 1. Claims 39-42 are rejected as the different color filters of Gunjima have different "optical property" by themselves, however, the path length differences of liquid crystal below the filters "normalizes" the "color balance", etc.

Claims 16-31 and 38 are allowed.

Kaneko '700, Hirata '018, Shimura '322, and Yagi '785 are relevant art.

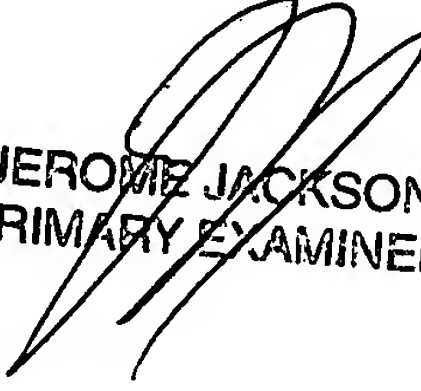
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerome Jackson Jr. whose telephone number is 571 272 1730. The examiner can normally be reached on t-th 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on 571 272 1664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2815

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jj

  
JEROME JACKSON  
PRIMARY EXAMINER